

Building Xerces

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3.1.3

redhat6-x86_64-64bit-gcc44

Obtained the source from: <http://xerces.apache.org/xerces-c/download.cgi>

- ./configure --prefix=blah
- make
- make install

2.8.0-gl1

These are instructions for building Xerces 2.8.0-gl1 for the various OSes supported.

redhat7-x86_64-64bit-gcc48

add -b 64 flag to the ./runConfigure step

redhat3-i686-32bit

These instructions should be performed as the glastrm user on a machine running redhat3 (noric05 as of this writing).

1. Obtain Xerces 2.8.0 source code from http://apache.mirrors.hoobly.com/xerces/c/2/sources/xerces-c-src_2_8_0.tar.gz and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/xerces if it doesn't already exist.
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/xerces
3. Unzip and Untar the file xerces-c-src_2_8_0.tar.gz
4. Change directory to xerces-c-src_2_8_0/src/xercesc
5. Edit file util/Platforms/MacOS/MacOSDefs.hpp
6. Replace lines 25-28 with

```
// -----  
// MacOS runs in big endian mode (PPC) or little endian (intel).  
// -----  
// This had to be changed to work on intel Macs but is not needed with  
// xerces version 3 and up. jcv  
  
#if defined(_BIG_ENDIAN) || defined(LITTLE_ENDIAN_)  
#if _BIG_ENDIAN_  
#define ENDIANMODE_BIG  
#else  
#define ENDIANMODE_LITTLE  
#endif  
#else  
#define ENDIANMODE_BIG  
#endif
```

7. Set environment variable XERCESCROOT to /afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/xerces/xerces-c-src_2_8_0/
8. Execute ./runConfigure -p linux -t native -P /afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/xerces/2.8.0-gl1/gcc32
9. Execute make
10. Execute make install
11. Leave and erase xerces-c-src_2_8_0/src/xercesc directory

redhat4-i686-32bit

These instructions should be performed as the glastrm user on a machine running redhat4 32bit (glastlnx14 as of this writing).

1. Obtain Xerces 2.8.0 source code from http://apache.mirrors.hoobly.com/xerces/c/2/sources/xerces-c-src_2_8_0.tar.gz and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/xerces if it doesn't already exist.
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/xerces
3. Unzip and Untar the file xerces-c-src_2_8_0.tar.gz
4. Change directory to xerces-c-src_2_8_0/src/xercesc
5. Edit file util/Platforms/MacOS/MacOSDefs.hpp
6. Replace lines 25-28 with

```
// -----  
// MacOS runs in big endian mode (PPC) or little endian (intel).  
// -----  
// This had to be changed to work on intel Macs but is not needed with  
// xerces version 3 and up. jcv  
  
#if defined(_BIG_ENDIAN) || defined(LITTLE_ENDIAN_)  
#if _BIG_ENDIAN_  
#define ENDIANMODE_BIG  
#else  
#define ENDIANMODE_LITTLE  
#endif  
#else  
#define ENDIANMODE_BIG  
#endif
```

7. Set environment variable XERCESCROOT to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/xerces/xerces-c-src_2_8_0/
8. Execute ./runConfigure -p linux -t native -P /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/xerces/2.8.0-g1/gcc34
9. Execute make
10. Execute make install
11. Leave and erase xerces-c-src_2_8_0/src/xercesc directory

redhat4-x86_64-64bit

These instructions should be performed as the glastrm user on a machine running redhat4 64bit (noric13 as of this writing).

1. Obtain Xerces 2.8.0 source code from http://apache.mirrors.hoobly.com/xerces/c/2/sources/xerces-c-src_2_8_0.tar.gz and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/xerces if it doesn't already exist.
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/xerces
3. Unzip and Untar the file xerces-c-src_2_8_0.tar.gz
4. Change directory to xerces-c-src_2_8_0/src/xercesc
5. Edit file util/Platforms/MacOS/MacOSDefs.hpp
6. Replace lines 25-28 with

```
// -----  
// MacOS runs in big endian mode (PPC) or little endian (intel).  
// -----  
// This had to be changed to work on intel Macs but is not needed with  
// xerces version 3 and up. jcv  
  
#if defined(_BIG_ENDIAN) || defined(LITTLE_ENDIAN_)  
#if _BIG_ENDIAN_  
#define ENDIANMODE_BIG  
#else  
#define ENDIANMODE_LITTLE  
#endif  
#else  
#define ENDIANMODE_BIG  
#endif
```

7. Set environment variable XERCESCROOT to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/xerces/xerces-c-src_2_8_0/
8. Execute ./runConfigure -p linux -t native -P /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/xerces/2.8.0-g1/gcc34
9. Execute make
10. Execute make install
11. Leave and erase xerces-c-src_2_8_0/src/xercesc directory

redhat5-i686-32bit

These instructions should be performed as the glastrm user on a machine running redhat5 32bit (bldlnx09 as of this writing).

1. Obtain Xerces 2.8.0 source code from http://apache.mirrors.hoobly.com/xerces/c/2/sources/xerces-c-src_2_8_0.tar.gz and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/xerces if it doesn't already exist.
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/xerces

3. Unzip and Untar the file xerces-c-src_2_8_0.tar.gz
4. Change directory to xerces-c-src_2_8_0/src/xercesc
5. Edit file util/Platforms/MacOS/MacOSDefs.hpp
6. Replace lines 25-28 with

```
// -----
// MacOS runs in big endian mode (PPC) or little endian (intel).
// -----
// This had to be changed to work on intel Macs but is not needed with
// xerces version 3 and up. jcv

#if defined(_BIG_ENDIAN) || defined(LITTLE_ENDIAN_)
#if _BIG_ENDIAN_
#define ENDIANMODE_BIG
#else
#define ENDIANMODE_LITTLE
#endif
#else
#define ENDIANMODE_BIG
#endif
```

7. Set environment variable XERCESCROOT to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/xerces/xerces-c-src_2_8_0/
8. Execute ./runConfigure -p linux -t native -P /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/xerces/2.8.0-g1/gcc41
9. Execute make
10. Execute make install
11. Leave and erase xerces-c-src_2_8_0/src/xercesc directory

tiger-i386-32bit

These instructions should be performed as the glastrm user on a machine running tiger (bldmac01 as of this writing).

1. Obtain Xerces 2.8.0 source code from http://apache.mirrors.hoobly.com/xerces/c/2/sources/xerces-c-src_2_8_0.tar.gz and save to /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/xerces if it doesn't already exist.
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/xerces
3. Unzip and Untar the file xerces-c-src_2_8_0.tar.gz
4. Change directory to xerces-c-src_2_8_0/src/xercesc
5. Edit file util/Platforms/MacOS/MacOSDefs.hpp
6. Replace lines 25-28 with

```
// -----
// MacOS runs in big endian mode (PPC) or little endian (intel).
// -----
// This had to be changed to work on intel Macs but is not needed with
// xerces version 3 and up. jcv

#if defined(_BIG_ENDIAN) || defined(LITTLE_ENDIAN_)
#if _BIG_ENDIAN_
#define ENDIANMODE_BIG
#else
#define ENDIANMODE_LITTLE
#endif
#else
#define ENDIANMODE_BIG
#endif
```

7. Set environment variable XERCESCROOT to /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/xerces/xerces-c-src_2_8_0/
8. Execute ./runConfigure -p macosx -n native -t native -P /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/xerces/2.8.0-g1/gcc40
9. Execute make
10. Execute make install
11. Execute install_name_tool -id libxerces-c.28.dylib ../../2.8.0-g1/gcc40/lib/libxerces-c.28.dylib
12. Execute install_name_tool -id libxerces-depdom.28.dylib ../../2.8.0-g1/gcc40/lib/libxerces-depdom.28.dylib
13. Execute install_name_tool -change /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/xerces/2.8.0-g1/gcc40/lib/libxerces-c.28.dylib libxerces-c.28.dylib ../../2.8.0-g1/gcc40/lib/libxerces-depdom.28.dylib
14. Leave and erase xerces-c-src_2_8_0/src/xercesc directory

2.7.0-g11

These are instructions for building Xerces 2.7.0-g11 for the various OSes supported.

leopard-i386-32bit

These instructions should be performed as the glastrm user on a machine running leopard (bldmac02 as of this writing).

1. Obtain Xerces 2.7.0 source code from http://archive.apache.org/dist/xml/xerces-c/Xerces-C_2_7_0/source/xerces-c-src_2_7_0.tar.gz and save to /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/xerces if it doesn't already exist.
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/xerces
3. Unzip and Untar the file xerces-2_7_0.tar.gz
4. Change directory to xerces-c-src_2_7_0/src/xercesc
5. Edit file util/Platforms/MacOS/MacOSDefs.hpp
6. Replace lines 25-28 with

```
// -----
// MacOS runs in big endian mode (PPC) or little endian (intel).
// -----
// This had to be changed to work on intel Macs but is not needed with
// xerces version 3 and up. jcv

#if defined(_BIG_ENDIAN) || defined(LITTLE_ENDIAN_)
#if _BIG_ENDIAN_
#define ENDIANMODE_BIG
#else
#define ENDIANMODE_LITTLE
#endif
#else
#define ENDIANMODE_BIG
#endif
```

7. Set environment variable XERCESCROOT to /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/xerces/xerces-c-src_2_7_0/
8. Execute ./runConfigure -p macosx -n native -t native -P /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/xerces/2.7.0-g1/gcc40
9. Execute make
10. Execute make install
11. Execute install_name_tool -id libxerces-c.27.dylib ../../2.7.0-g1/gcc40/lib/libxerces-c.27.0.dylib
12. Execute install_name_tool -id libxerces-depdom.27.dylib ../../2.7.0-g1/gcc40/lib/libxerces-depdom.27.0.dylib
13. Execute install_name_tool -change /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/xerces/2.7.0-g1/gcc40/lib/libxerces-c.27.dylib libxerces-c.27.dylib ../../2.7.0-g1/gcc40/lib/libxerces-depdom.27.0.dylib
14. Leave and erase xerces-c-src_2_7_0/src/xercesc directory